CHAPTER 3. CONDUCT RAMP INSPECTION OF OPERATOR'S AIRCRAFT

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3627

B. Avionics: 5627

3. OBJECTIVE. This chapter provides guidance for sampling the quality of maintenance and the degree of compliance with the operator's maintenance procedures on in-service aircraft operated under Title 14 of the Code of Federal Regulations (14 CFR) part 121, 125, 129 (§ 129.14), 133, 135, 137, 141, or 142.

5. GENERAL.

A. Inspector Training. It is important that aviation safety inspectors (ASI) become familiar with the type of aircraft to be inspected before performing the inspection. This can be accomplished by on-the-job training.

NOTE: Only ASIs who have received part 129 geographic inspector training or are permanently assigned to an International Field Office (IFO) may conduct foreign air carrier inspections.

B. Personnel Needed for Inspection. Due to the hub and spoke concept, many aircraft have less than 1 hour ground time. To ensure that the inspection is performed adequately, the Federal Aviation Administration (FAA) recommends that two inspectors perform this task in exterior and interior phases.

NOTE: ASIs don't have to give part 129 operators advance notice that a ramp inspection will be conducted. However, inspection activities must be timed so they do not delay or interfere with passenger boarding or deplaning or impede aircraft service or catering. The captain, his or her representative, or an appropriate airline representative should also be present.

C. Coordination.

(1) Airworthiness and Operations ASIs possess various degrees and types of expertise and experience. An ASI who needs additional information or guidance on a given subject should coordinate with personnel experienced in that particular specialty.

(2) Geographic units may need to coordinate with the certificate-holding district office (CHDO) for domestic operations and the IFO for part 129 operations, as they do not always have access to the air carrier maintenance procedures manual. In addition, when discrepancies are found, the geographic unit should communicate with the CHDO or the IFO.

D. Use of FAA ASI Credentials to Access Aircraft and Secure Areas of U.S. Airports. Proper use of identification credentials, checkpoint procedures, and resolution of misunderstandings with airlines and other government agencies are crucial for the creation of an environment where ASIs can conduct effective inspections and surveillance. Both the FAA Flight Standards Service and the Transportation Security Administration (TSA) have reaffirmed the necessity of ASI access to Security Identification Display Areas (SIDA) and Airport Operations Areas (AOA). However, because of TSA's enhanced screening process and other airport security measures, ASIs must undergo extra steps when entering a SIDA. FAA Order 8000.38, Aviation Safety Inspector Credential Program, as amended, provides guidance and policy for the use of FAA Form 110A, Aviation Safety Inspector's Credential. ASIs should reference this order for specific guidance and policy on access to aircraft and secure areas of U.S. airports.

7. INITIATION AND PLANNING.

A. This task is scheduled as part of the work program or special emphasis request. Additional inspections are initiated by national, regional, or district office special requirements.

B. The ramp inspection provides the ASI with an opportunity to ensure that the compliance dates and requirements of new Airworthiness Directives (AD)

and regulatory revisions have been met. ADs, Service Difficulty Report Summaries, Maintenance/ Airworthiness Bulletins, and PTRS entries should be reviewed, when available. (This is also applicable to U.S.-registered aircraft operated by foreign operators under § 129.14).

9. MAINTENANCE RECORDS.

A. Regulations require maintenance to be recorded whenever it is performed prior to an approval for return to service. The operator's maintenance procedures manual should describe the procedures for ensuring that these recording requirements are met, including the specific instructions on when an airworthiness release or appropriate maintenance log entry is required.

B. Operators/air carriers must either correct or defer all mechanical discrepancies entered in the maintenance log using the methods identified in their maintenance procedures manual.

C. The Minimum Equipment List (MEL) has certain procedures and conditions that operators/air carriers must meet prior to deferring the item(s).

(1) These procedures are identified by "O," "M," and "O/M" and are normally contained in the operator's FAA-approved MEL. Sometimes the MEL references these procedures to another document.

(2) When reviewing the records for MEL compliance, the ASI must determine what procedures are required for deferral and ensure that these procedures are accomplished.

(3) The ASI must ensure that all applicable repetitive MEL procedures are accomplished for those items that are deferred and are continuing to be deferred through the station. These repetitive maintenance procedures must be signed off in the maintenance log as evidence that the procedures were accomplished.

11. DEFERRED MAINTENANCE.

A. Minimum Equipment List — Deferred Maintenance. The operator's FAA-approved MEL allows the operator to continue a flight or series of flights with certain inoperative equipment. The continued operation must meet the requirements of the MEL deferral classification and the requirements for the equipment loss.

B. Other Deferred Maintenance.

(1) Operators frequently use a system to monitor items that have been inspected and found within serviceable limits. These items are still airworthy, yet warrant repair at a later time or when items no longer meet serviceable limits. This method of deferral may require repetitive inspections to ensure continuing airworthiness of the items. Examples of items that are commonly deferred in this manner are fuel leak classifications, dent limitations, and temporary (airworthy) repairs.

(2) Passenger convenience item (not safety/ airworthiness related) deferrals should be handled in accordance with (IAW) the operator's program.

C. Prompt Repairs. The maintenance program approved for an operator must provide for prompt and orderly repairs of inoperative items.

13. CABIN INSPECTION.

A. This inspection should be conducted immediately, when possible, without disturbing the loading and unloading of passengers. The inspection can be performed when some passengers are onboard during through-flights, but ASIs must exercise good judgment by inspecting areas away from the passengers.

B. Bring any discrepancy to the attention of the flightcrew or appropriate maintenance personnel immediately.

15. CARGO/PAX COMBINATION CONFIGURED AIRCRAFT.

A. Structural Damage. Inspection results have disclosed instances of significant aircraft structural damage resulting from careless loading of cargo, such as:

- Torn or punctured liners, indicating hidden damage to circumferential stringers, fuselage skin, and bulkheads
- Damaged rollers, ball mats, etc., causing significant structural damage to the floors
- Corrosion and structural damage caused by improper handling of some hazardous materials

NOTE: Observation of hazardous material handling is normally not a surveillance function of the ASI during a ramp inspection.

However, if discrepancies are noted during the ramp inspection, the ASI should contact the appropriate TSA office.

B. Cargo Containers, Pallets, and Netting. As part of their normal surveillance, principal inspectors (PI) should ensure that adequate procedures are in place in the operator's manual to ensure that cargo restraint equipment conform to proper standards and are in condition to perform their intended function.

(1) If maintenance is required on any of the type certificate (TC) or supplemental type certificate (STC) cargo containers or restraint devices, it must be accomplished IAW appropriate regulations.

(2) Geographic inspectors performing air carrier surveillance should follow handbook guidance and report discrepancies in cargo handling/restraint devices through PTRS for follow-up action by the PI.

17. PERFORMING THE RAMP INSPECTION.

A. This inspection must be accomplished without interfering with the turnaround of the aircraft. The following list includes some of the activities that could cause a delay in the turnaround time if interfered with:

- Boarding and deplaning of passengers
- Servicing
- Fueling
- Maintenance
- Baggage handling
- Any other operator activity

B. The ASI must immediately bring any discrepancies noted to the attention of appropriate personnel, to allow the operator the opportunity to take corrective action without interrupting the flight schedule. The ASI must verify that all corrective actions taken were IAW the requirements of the operator's maintenance procedures manual.

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SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of parts 121, 125, 129 (§ 129.14), and 135, as applicable
- Successful completion of the Airworthiness Inspector Indoctrination course(s) or equivalent
- Experience working with similar type aircraft
- Completion of the FAR 129 Inspections of Foreign Operated Aircraft course

B. Coordination:

- This task may require coordination between Maintenance, Avionics, Cabin Safety, and Operations ASIs
- Geographic units should coordinate with the CHDO or the IFO

3. REFERENCES, FORMS, AND JOB AIDS.

A. References:

- Title 14 CFR parts 21, 23, 25, 27, 29, 43, 45, 47, and International Civil Aviation Organization (ICAO) annex 6 and 8
- FAA Order 8340.1, Maintenance Bulletins, as amended
- Operator's Maintenance Procedures Manual

B. Forms:

- FAA Form 110A

C. Job Aids:

- FAA Order 8300.10, Airworthiness Inspector's Handbook, vol. 3, ch. 1, Introduction to Aircraft and Equipment, figure 1-1, Interior Inspection Guidelines
- Order 8300.10, vol. 3, ch. 1, figure 1-2, Exterior Inspection Guidelines
- JTAs: 2.2.4, 2.2.5, 2.3.58

5. PROCEDURES.

A. Begin the Inspection. Begin the ramp inspection IAW the district office work program or other directives.

B. Prepare for the Inspection.

(1) Review the operator's schedule, select the flight to be inspected, and determine the type of equipment and ground time needed.

(2) Determine recent problem areas that were identified for that type of aircraft, if any.

(3) Determine if recent regulatory changes and AD requirements affect the aircraft to be inspected.

C. Conduct the Exterior Inspection, as Applicable. Perform this inspection IAW vol. 3, ch. 1, figure 1-2.

D. Interview the Flightcrew. Introduce yourself and describe the purpose and scope of the inspection.

E. Inspect the Aircraft Maintenance Records.

(1) Prior to departure of the aircraft, ensure that all open discrepancies from the previous flight are resolved IAW the operator's manual.

(2) Review the maintenance records to determine if repetitive maintenance problems exist, which might indicate a trend.

(3) Ensure that all MEL items are deferred IAW the provisions of the operator's FAA-approved MEL.

(a) Review the operator's FAA-approved MEL to determine if conditions, procedures, and placarding requirements were accomplished to defer specific items correctly.

(b) Note the date when an item was first deferred to determine if the maximum allowed length of deferral was exceeded. Accomplish this by examining maintenance record pages, the deferred maintenance list, or deferred maintenance placards or stickers.

(4) Ensure that an airworthiness release, maintenance record entry, or appropriate approval for return to service was made after the completion of maintenance.

(5) Ensure that the maintenance record contains the following for each discrepancy:

- Description of the work performed or a reference to acceptable data
- Name or other positive identification of the person approving the work

- Name of the person performing work, if outside the organization

F. Conduct the Interior Inspection, as Applicable. Perform this inspection IAW vol. 3, ch. 1, figure 1-1.

G. Debrief the Operator. Inform the flightcrew or appropriate personnel that the inspection has been completed. Discuss the discrepancies brought to the operator's attention during the inspection.

H. Examine the Maintenance Record Entries. Ensure that the operator has recorded all discrepancies noted during this inspection. If time is available, monitor the operator's corrective actions.

I. Analyze Findings. Analyze each finding to determine if the discrepancies are the result of improper maintenance and/or missing or inadequate maintenance/inspection procedures.

7. TASK OUTCOMES.

A. File PTRS Data Sheet.

(1) For Part 129 Only. The data reporting requirements for completing a part 129 aircraft ramp inspection using surveillance activity codes 3627 and 5627 have been revised. Section IV of the Data Sheet indicates each area that should be examined in the performance of 3627/5627 inspections. Comments are required only for those areas with findings or discrepancies noted during the inspection. For each discrepancy or finding, enter the appropriate primary area and key word on the Data Sheet. Next, enter either a potential (P) or unsatisfactory (U) for discrepancies and findings. In the PTRS comment field (section IV), enter the line item identification number shown on the Figure Sheet (1.1, 2.6, 3.4, etc.) and then enter a description of the discrepancy. If a positive comment is needed in a particular area for clarification, enter it using the appropriate primary area and key word shown on the PTRS form, using the information (I) opinion code. Only positive comments or comments provided for clarification purposes may use the I opinion code. All findings and discrepancies must use either the P or U opinion code.

(2) Other Inspections. All other ramp inspections should be entered into PTRS IAW the PTRS procedure manual (PPM).

B. Complete the Task. Completion of this task can result in the following:

(1) Appropriate enforcement action when analysis of the findings disclose improper maintenance.

(2) Written notification to the operator of the necessary changes to the manual, when analysis of the findings disclose missing or inadequate maintenance/ inspection procedures.

(3) Communication with the CHDO/IFO by the geographic unit finding discrepancies.

9. FUTURE ACTIVITIES. Based on inspection findings, determine if closer surveillance, additional enforcement, other job tasks, and/or additional coordination between the CHDO/IFO and geographic units are required to regain compliance.